



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,898	11/03/2003	Daniel Edward Bowen III	DN2001-163D07	4397

7590 10/06/2005

The Goodyear Tire & Rubber Company
Patent & Trademark Department - D/823
1144 East Market Street
Akron, OH 44316-0001

EXAMINER

CHOI, LING SIU

ART UNIT PAPER NUMBER

1713

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,898

Applicant(s)

BOWEN ET AL.

Examiner

Ling-Siu Choi

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 17-19 is/are rejected.
- 7) ☒ Claim(s) 6-16 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/06/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This Application is a Division of US Application No. 10/222,739, filed August 16, 2002. Claims 1-20 are now pending, wherein claims 1 and 6 are independent ones.

Claim Objections

2. Claims 6-16 and 17-20 are objected to because of the following informalities:

Claim 6, structural formula, lines 36-37 and 41-42, the numbers used to represent the compounds are suggested to be changed from (1)....(9) to (5)....(13) respectively;

Claims 17-20, lines 2-3, "wherein at least one of the members selected from the group consisting of R, R', and R" is a hydroxy groups" is suggested to be changed to -- wherein at least one of R, R', and R" is a hydroxy group--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5 and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

Claim 1, Formula 4, when Y is C(R)R', the monomer represented by Formula 4 is not a silyl-**acetal** compound and is different from the compounds represented by Formula 1-3 because the acetal is defined as **RO-C(R)₂-OR**.

Allowable Subject Matter

5. Claims 1-20 are allowable over the closest references: Ender (US 3,287,291), Nakamura et al. (US 5,973,067), and Britton (US 5,618,951).

Ender discloses an organosilicon compound represented by the formula of $\text{Si}[(\text{OCH}_2)_n\text{OCH}_3]_4$ which includes $\text{Si}(\text{OCH}_2\text{OCH}_3)_4$, $\text{Si}[(\text{OCH}_2)_5\text{OC}_4\text{H}_9]_4$, $\text{Si}(\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_3)(\text{OCH}_2\text{OCH}_2\text{OC}_2\text{H}_5)(\text{OCH}_2\text{OCH}_2\text{OCH}_3)$, $\text{Si}(\text{OCH}_2\text{OCH}_3)[(\text{OCH}_2)_3\text{OCH}_3][(\text{OCH}_2)_2\text{OCH}_3][(\text{OCH}_2)_4\text{OCH}_3]$ (col. 1, lines 15-20; col. 2, lines 14-26). However, Ender does not teach or fairly suggest the claimed modified compound containing Ge, Sn, Pb, Ti, or Zr.

Nakamura et al. disclose an alkenyltrialkoxysilane which can be allyltrimethoxysilane, allyltriethoxysilane, allyltri(ethoxymethoxy)silane, butenyltrimethoxysilane, hexenyltrimethoxysilane, or hexaenyltriethoxysilane (claims 1 and 3). However, Nakamura et al. do not teach or fairly suggest the claimed modified compound containing Ge, Sn, Pb, Ti, or Zr.

Britton discloses 2,2-difluoroketene silyl acetal (claim 1, Formula I). However, Britton. does not teach or fairly suggest the claimed modified compound containing

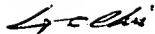
Art Unit: 1713

Ge, Sn, Pb, Ti, or Zr.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.



**LING-SUI CHOI
PRIMARY EXAMINER**

September 28, 2005